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Water managers' decision to back-pump is justified

By

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The Post's recent news articles on the Lake Okeechobee backpumping issue did not take into consideration the severe water supply crisis affecting South Florida and the rest of the state. I would like to provide an objective, more balanced view of the South Florida Water Management District's decision to back-pump stormwater into Lake Okeechobee.

South Florida is in the grip of a record-setting water shortage. Lake Okeechobee, our primary storage area, is more than 4 feet below normal and is expected to surpass the all-time low set in 1981. All three Everglades water conservation areas are at critically low levels.

During a water shortage, rainfall is obviously at a premium. Capturing and storing rainfall – when it does happen – is a responsible, and expected, water management action. While the best-case scenario is for the needed rain to fall directly over our regional storage areas, that doesn't always happen. That's why South Florida's network of flood-control canals, levees, structures and pumping stations also are designed to help catch and move water into storage for water supply purposes.

Now, that capacity is somewhat limited. A key component of our long-term Comprehensive Everglades Restoration Plan includes changes to the existing water management system to further increase water storage. The recent decision to backpump water is based on the critical need to enhance storage, particularly when water is scarce.

To take advantage of rain that falls just south of Lake Okeechobee – stormwater runoff that normally would flow into canals and then follow gravity to the south – the water management district has the capability to "back-pump" the extra water north into the lake.

The governing board endorsed a comprehensive drought management strategy that includes emergency water-supply back-pumping. We did not make this decision lightly. We recognize the potential environmental effects of this action and have built-in

operating, monitoring and reporting protocols to minimize adverse impacts to the ecosystem.

It is important to note that the expected amount of nutrients entering the lake through this particular water supply-enhancement effort is small when compared to the other nutrient inputs to the lake -- direct rainfall, runoff and inflows from north of the lake. Another key point is that the excess water has to be captured and stored someplace. With our current system, those options are north to the lake and south to the Everglades.

Both ecosystems are subject to changes in nutrient-level balances. In a severe water shortage, the lake is the most efficient regional storage area we have.

Given the environmental concerns, why endorse back-pumping? The lake is the backup water-supply source for the Everglades water conservation areas and recharges the lower east coast's underground aquifer system. It also helps combat saltwater intrusion into Lee County and the city of Fort Myers utility in-takes.

The lake is the direct source for communities and businesses located around the lake – South Bay, Bryant, Clewiston, Pahokee, Belle Glade and Okeechobee. Because the lake level is so low, these utilities are considered imminently "at risk" because their intake facilities may be unable to pull water for treatment and delivery of drinking water to lakeside residents. In addition to the back-pumping efforts to increase storage in the lake, the water management district also has authorized technical assistance and $600,000 to ensure that these utilities – and the 50,000 customers they serve – will have water when needed.

As the backup supply for most of the lower east coast and some lower west coast wellfields, many other utilities in South Florida are also considered "at risk" due to the regional storage deficit. Those include: Lee County, Fort Myers, Riviera Beach, Lake Worth, Lantana, Manalapan, Highland Beach, Deerfield Beach, Hillsboro Beach, Pompano Beach, Dania, Broward System 3A, Hollywood, Hallandale, Miami-Dade/Rex, Homestead, Florida City and the Florida Keys Aqueduct Authority. These communities will be the first to rely on the need for replenishing water from Lake Okeechobee if the drought continues … or worsens.

Water management is a daily balancing act. While consideration of our four mission elements--water quality, flood control, natural systems, and water supply--is always at the forefront of our actions, the “weighting” of the factors changes from time to time.

Water management is also dealing with realities. And the reality is that to effectively manage a severe water shortage, we have to expect some trade-offs. Our job is to ensure that these lakeside and other at-risk communities will have water today--and tomorrow. Back-pumping -- as one component of a comprehensive drought management plan -- is an appropriate course of action.

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